



Snohomish County Public Works

PUBLIC NOTICE

DETERMINATION OF NONSIGNIFICANCE (DNS)

PROJECT NAME: 2016-2020 Snohomish County Road Maintenance Program

DESCRIPTION OF PROPOSAL:

Roadway maintenance activities are performed on an “as needed” and proactive basis. Sometimes these activities are triggered by public requests/comments or inspections conducted by Public Works’ Road Maintenance Division or Surface Water Management Division. Typical road maintenance activities would include the following:

- Road Shoulder Maintenance
- Embankment Stabilization and Repair
- Gravel Road Maintenance
- Paved Road Maintenance
- Traffic Control System Maintenance
- Vegetation Management
- Road Cleaning and Debris Removal
- Pedestrian and Roadside Fence Maintenance
- Ditch Maintenance
- Culvert Cleaning, Repair and Replacement
- Catch Basin Cleaning, Repair and Replacement
- Detention and Infiltration Facility Maintenance

The Road Maintenance Division also installs and maintains a variety of drainage facilities including Department of Parks’ drainage facilities and other drainage-related structures. Parks’ drainage facilities and other drainage related activities, such as replacement of open drainage facilities with closed piped conveyances, would vary by project and location. Work crews would use equipment and methods similar to those used for maintenance of other surface water drainage facilities.

LOCATION OF PROPOSAL:

These activities are conducted as needed throughout unincorporated Snohomish County

APPLICANT AND CONTACT PERSON:

Contact: Mary Auld, Senior Planner
Snohomish County Public Works
3000 Rockefeller Ave., M/S 607, Everett, WA 98201
(425) 388-3488 extension 4510
E-mail: mary.auld@snoco.org

LEAD AGENCY:

Snohomish County Public Works (Lead Department)

THRESHOLD DETERMINATION:

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

PUBLIC COMMENT AND APPEAL PERIOD:

There is a concurrent 14-day comment and appeal period on the DNS. The public is invited to comment on this proposal according to the schedule below. The file is available for review at Snohomish County Public Works, 3000 Rockefeller Ave., Robert J. Drewel Building, 2nd Floor, Customer Service Center, Everett, Washington. Please contact Mary Auld for assistance prior to your arrival at the Customer Service Center.

Comments on the DNS addressing environmental issues must be submitted in writing by 5:00 PM, on November 16, 2015. Written comments will be considered and may cause the DNS to be revised. Appeals to the DNS must be submitted in writing also by 5:00 PM, on November 16, 2015.

RESPONSIBLE OFFICIAL:

Signature:  Date: October 28, 2015
Steven E. Thomsen, P.E., Public Works Director

Disclaimer: The issuance of this Determination of Non-Significance (DNS) should not be interpreted as acceptance or approval of this proposal as presented. Snohomish County reserves the right to deny or approve said proposal subject to conditions if it is determined to be in the best interest of the County and/or necessary to the general health, safety, and welfare of the public to do so

SEPA PROGRAMMATIC CHECKLIST DISTRIBUTION LIST

Tribal Government

Muckleshoot Tribe
Samish Indian Nation
Sauk-Suiattle Tribe
Skagit River System Cooperative
Snoqualmie Tribe
Stillaguamish Tribe
Suquamish Tribe
Swinomish Indian Tribal Community
Tulalip Tribes
Upper Skagit Indian Tribe

Federal Agencies

Army Corps of Engineers
Fish and Wildlife Service
National Marine Fisheries Service

State Agencies

Department of Archaeology and Historic Preservation
Department of Ecology
Department of Fish and Wildlife
Department of Natural Resources
Department of Transportation

Other

Snohomish County Planning and Development Services
Snohomish County Department of Parks and Recreation
Adopt-a-Stream Foundation
Snohomish Conservation District
Futurewise

VI and Americans with Disabilities Act (ADA) Information: It is Snohomish County's policy to assure that no person shall on the grounds of race, color, national origin, or sex as provided by Title VI of the Civil Rights Act of 1964, as amended, be excluded from participation in, be denied the benefits of, or otherwise be discriminated against under any County sponsored program or activity. For questions regarding Snohomish County Public Works' Title VI Program, or for interpreter or translation services for non-English speakers, or otherwise making materials available in an alternate format, contact the Department Title VI Coordinator via e-mail at spw-titlevi@snoco.org or phone 425-388-6660. Hearing/speech impaired may call 711.



Snohomish County Public Works

ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

SUMMARY

A. BACKGROUND

1. Name of proposed proposal, if applicable:
2016-2020 Snohomish County Road Maintenance Program
2. Name of applicant:
Snohomish County Public Works
3. Address and phone number of applicant and contact person:
Contact Person:
Mary Auld, Senior Planner
Snohomish County Public Works
Transportation and Environmental Services Division
3000 Rockefeller Avenue, M/S 607
Everett, Washington 98201-4046

(425) 388-3488 ext. 4510
Mary.auld@snoco.org
4. Date checklist prepared:
October 20, 2015
5. Agency requesting checklist:
Snohomish County

6. Proposed timing or schedule (including phasing, if applicable):
This SEPA Checklist is prepared for road maintenance activities for the period of January 2016 to December 2020. Road maintenance activities may be conducted, as needed, throughout the year. Some road maintenance activities are weather dependent and generally occur during the dry season from April through September. All work that requires government approvals or permits will conform to work windows or timing conditions identified in those government approvals or permits. Work duration would range from less than one week to two months for individual maintenance activities.

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, explain.
Road maintenance activities are anticipated to be on-going and extend beyond the January 2016 to December 2020 timeframe proposed in this SEPA Checklist. Additionally new road construction, private development and changes in land use not covered under this SEPA Checklist, sometimes requires the installation of new drainage facilities to alleviate flooding and road hazards. Once installed, these facilities may increase the demand for maintenance activities.

8. List any environmental information you know about that has been prepared or will be prepared, directly related to this proposal.
Regional Road Maintenance Endangered Species Act (RRMESA) Program Guidelines.
The RRMESA Program Guidelines provide a consistent, regional program that is used by Snohomish County Public Works' Road Maintenance Division to limit, reduce, or eliminate take of threatened species under the 4(d) rule and/or Section 7 of the Endangered Species Act. The *RRMESA Program Guidelines* outlines best management practices (BMPs) for road maintenance activities.

Snohomish County Road Maintenance Performance Standards and Standard Operating Procedures.

Performance Standards and Standard Operating Procedures provide guidelines for maintenance and repair of the roadway system and drainage facilities. The standards identify outcomes, equipment, materials, techniques and other information used to carry out activities of the Road Maintenance Division.

Snohomish County Drainage Manual.

The Drainage Manual sets forth requirements for identifying, selecting, designing and implementing stormwater BMPs for unincorporated Snohomish County (County) including road maintenance. The manual meets the requirements of Snohomish County Codes and state water quality standards, and complies with the Clean Water Act, Puget Sound Water Quality Management Plan, and the National Pollution Discharge Elimination System (NPDES) Phase 1 Municipal Stormwater Permit.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the affected geographic area covered by your proposal? If yes, explain.

No pending government approvals or proposals are known to affect the geographic area covered by this proposal at this time.

10. List any government approvals or permits that will be needed for your proposal, if known. **Government approval and permits required for road maintenance activities would vary by activity and location. Each activity would be individually reviewed and government approvals and permits will be obtained as needed. Required permits and approvals may include:**

- **Endangered Species Act**

Road maintenance activities must comply with the National Oceanic and Atmospheric Administration 2(d) rule for threatened Chinook salmon as well as Section 4(d) which prohibits “take” of endangered species. The Road Maintenance Division participates in the RRMESA which satisfies requirements under Section 4(d). Additionally, when road maintenance activities require a federal authorization or utilize federal funds, a Section 7 consultation may be necessary to ensure activities do not jeopardize the continued existence of an endangered species, or destroy or adversely modify critical habitat [16 U.S.C. §1536(a)(2)].

- **Clean Water Act**

Pursuant to the Federal Water Pollution and Control Act (Clean Water Act), as amended, a Section 404 permit from the U.S. Army Corps of Engineers would be required for any discharge of dredge or fill material waterward of the ordinary high water mark, or mean higher high tide line in tidal areas, in waters of the United States. A permit may be required in association with river slope protection, culvert replacement and other road maintenance activities. Additionally, Section 402 of the Clean Water Act established the NPDES program. Road maintenance activities are covered under the County Phase 1 General Municipal Stormwater Permit.

- **Rivers and Harbors Act**

This act regulates any work in, over, or under navigable waters of the United States. A permit from the U.S. Army Corps of Engineers would be required for work that requires dredging or excavation in navigable waters.

- **National Flood Insurance Program**

The Federal Emergency Management Agency (FEMA) requires a permit be issued for activities that occur within designated Flood Hazard Areas. Requirements under the National Flood Insurance Program for Road Maintenance Program activities are satisfied by the RRMESA program.

- **Hydraulic Project Approval (HPA)**

The Washington Department of Fish and Wildlife must issue an HPA for road maintenance activities affecting “waters of the state” (WAC 220-110). Activities may be covered under a General HPA or project specific “Individual” HPA.

- **Water Quality Standards for Groundwaters of the State of Washington and Underground Injection Control Program**

This program regulates subsurface infiltration systems including dry wells, infiltration trenches, and other infiltration systems that are deeper than the widest surface dimension. Underground Injection Control (UIC) wells are required to be registered with the Washington State Department of Ecology and to ensure ground water is not endangered by pollutants in the discharge (WAC 173-200 and WAC 173-218).

- **Shoreline Management Act**

Pursuant to the Shoreline Management Act of 1971, road maintenance activities may require a Shoreline Substantial Development Permit for activities that exceed “normal maintenance and repair of existing structures” Washington Administrative Code (WAC) 173-27-040.

- **Underground Utility Damage Protection Act**

This act requires maintenance activities that have the potential to damage vital utility services to locate and take measures to prevent damage to those services prior to excavation (Chapter 19.122 RCW).

- **Snohomish County Code (SCC)**

Road maintenance activities are required to comply with applicable provisions of SCC Chapter 30.63 (Critical Areas Regulations), Chapter 30.63A (Drainage), Chapter 30.63B (Land Disturbing Activity), Chapter 30.63C (Low Impact Development), and Chapter 30.44 (Shoreline Permits).

11. Give brief, complete description of your proposal, including the proposed uses and size of the proposal and affected geographic area. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on proposal description.)

Roadway maintenance activities are performed on an “as needed” and proactive basis. Sometimes these activities are triggered by public comments or inspections conducted by the Road Maintenance Division or Surface Water Management Division. Typical road maintenance activities would include the following:

Road Shoulder Maintenance:

Shoulder maintenance activities would include repair and reshaping the road shoulder by grading or adding gravel, pulling vegetation and sediment, and “grubbing” or digging in the soil to remove vegetation by the root. Work crews would use hand tools; heavy

equipment such as graders, backhoes, excavators, trucks, and belt loaders; as well as specialized equipment (e.g. shoulder maintainer) to perform this work. Materials picked up or generated from road shoulder maintenance would be recycled or disposed of at an appropriate facility.

Embankment Stabilization and Repair:

Erosion, floods, water infiltration or unstable soil conditions caused by decaying organic materials (e.g. logs) or improper construction methods may cause slides, slumping embankments, subgrade failures, unstable road shoulders, and washouts. Work crews would use a variety of techniques and materials to stabilize soils, repair retaining walls and road surfaces. Slide repairs above a road would generally include removal of debris and construction of a rock buttress or support structure at the base of the slide. The slope would then be filled with quarry spalls, compacted and stabilized with fiber netting and reseeded with grass.

Embankment stabilization and repair (including river slope protection) would typically include removing existing asphalt and other unstable materials in the failed area, replacement with suitable materials such as angular rock or quarry spalls, and installation of drainage structures such as filtering medium, gravel drains, perforated pipe, or geotextile fabric. Other bioengineering techniques and habitat enhancement (e.g. installation of Large Woody Material at the toe of river slopes) may be used depending on site conditions. Following stabilization, disturbed soils would be treated with erosion mats, sod and re-seeded or planted with native shrubs. Any damage to the road shoulder and surfaces would be repaired in accordance with County Road Maintenance Performance Standards and Standard Operating Procedures. Work crews would use hand tools, heavy equipment such as backhoes, excavators, mobile cranes and trucks as well as specialized equipment (e.g. Hydroseeder) during construction.

Gravel Road Maintenance:

Spreading gravel, grading, and dust control would be involved in gravel road maintenance. Work crews may spread a layer of gravel or grade existing road surfaces to even out rough areas (e.g. potholes). Work crews may use hand tools such as shovels and steel brooms as well as heavy equipment such as trucks and graders and Washington State approved dust suppressants.

In accordance with the annual paving plan, work crews may also pre-level roadways to restore the grade and crown of roadways. Work crews would use hand tools and heavy equipment such as graders, asphalt rollers and pavers to level areas of settlement, depressions or cracking and apply asphalt to the roadway surface.

Paved Road Maintenance:

Maintenance of paved roads includes patching asphalt, sealing cracks, chip seal, and minor repaving. Patching involves filling rough areas (e.g. potholes). Sealing cracks and chip sealing involves the application of a hot mix asphalt, cold mix asphalt or other

asphalt and rubber compounds into cracks and voids in the existing pavement. In areas where the existing asphalt has worn out or there are numerous failures (e.g. potholes), minor repaving may be warranted. Paving would involve hauling, placing, compacting and finishing asphalt. During paved road maintenance, work crews would use hand tools including asphalt lutes, shovels and brooms as well as heavy equipment such as graders, rollers, pavers, tractors, trailers and trucks.

Traffic Control System Maintenance:

Traffic control system maintenance includes painting and paint removal from road surfaces. Examples of painted traffic control devices are: center line stripes, edge lines and traffic lane markings. Traffic control system maintenance also includes repair, removal or installation of signs, guardrails, concrete median “jersey barriers”, raised pavement markers and thermal plastic road symbols. Thermal plastic road symbol maintenance involves using a heated resin-based material and reflective glass beads to create or re-create stop bars, crosswalks, edge lines or other symbols to improve traffic safety. The County operates and maintains these devices in accordance with the standards set forth in the Manual on Uniform Traffic Control Devices (MUTCD).

In order to perform painting maintenance, work crews would use hand tools such as air compressors and portable paint sprayers. Heavy equipment like paint striper trucks would also be used. When needed, paint removal may require sand blasting, burning, grinding or over-painting. Sign maintenance would require the use of hand tools such as post hole diggers and shovels as well as heavy equipment like trucks and trailers. Pressure washers and paint may also be used to remove graffiti from signs and to paint guardrails. Guardrails, jersey barriers, raised pavement markers and thermal plastic symbols are maintained using a variety of heavy and specialized equipment such as vans, cranes, trucks, thermal plastic melter, and glue dispensers.

Vegetation Management:

Vegetation management would include mowing of road shoulders, brush cutting, noxious weed control and removal, wetland mitigation, landscape maintenance, tree trimming, and removal of dangerous trees to enhance motorist safety, improve drainage, and increase the longevity of roadways, dikes and levees. Wetland mitigation would involve planting and maintaining vegetation at mitigation sites throughout the County. Work crews would use hand tools such as chainsaws, aerial saws, weed eaters and loppers; heavy equipment including tractor mounted mowers and brush cutters, trucks and chippers; as well as herbicides to manage vegetation.

Road Cleaning and Debris Removal:

In general, road clearing and debris removal activities would include: street sweeping, permeable pavement cleaning, litter pick-up, hazardous materials identification and dead animal removal. Cleaning crews would use trucks with mechanized brooms to sweep streets. In order to remove litter, dead or dying animals from the road right-of-way cleaning crews would use hand tools, personal safety equipment and trucks. Debris and

garbage removed from the right-of-way and undeveloped County owned parcels would be taken to an appropriate recycling or disposal facility. Work crews may use trucks with a mounted drainage system cleaning device called a “Vactor/Jetter Truck” or new or experimental technology to clean permeable pavement. Vactor/Jetter Trucks have a freshwater supply and pump system used to flush and remove pollutants and sediment from roadways.

Occasionally hazardous materials on the right-of-way or undeveloped County owned parcels are encountered when conducting road cleaning and debris removal activities. If encountered, crews would notify the Washington Department of Ecology and/or Snohomish Health District, who is responsible for identification, clean-up and disposal of hazardous materials. Work crews may assist in initial containment or clean-up of spills.

Pedestrian and Roadside Fence Maintenance:

The Road Maintenance Division regularly maintains pedestrian sidewalks and walkways as well as roadside fences. Maintenance may include debris removal as well as filling or grading humps and depressions. Work crews would use hand tools such as concrete saws, shovels, rakes, post-hole diggers and shovels as well as specialized tools and heavy equipment such as trucks and graders to perform maintenance activities. Vactor/Jetter trucks or new or experimental technology would be used to clean permeable pavement sidewalks.

Ditch Maintenance:

In order to maintain effective conveyance of water from roadways, the Road Maintenance Division inspects, cleans and reshapes ditches to improve water flow. Some ditches are channelized streams and are included within this maintenance activity. Ditch maintenance may include the use of hand tools such as shovels and rakes, or heavy and specialized equipment such as backhoes, excavators or Ditch Masters to remove sediment and debris. Once removed, sediment and debris is loaded into trucks and hauled to an appropriate recycling or disposal facility. In steep areas, check dams and flow spreaders may be installed to prevent erosion.

Culvert Cleaning, Repair and Replacement:

Culverts may become plugged with debris and sediment and require cleaning. Work crews would use hand tools such as a shovel or rake, or heavy equipment such as a back hoe to clean out culvert ends. These tools would also be used to reshape the stream channel or ditch near the culvert ends. If the blockage is inside the culvert, then crews would use a Vactor/Jetter truck to remove debris and sediment. The Vactor/Jetter truck uses a freshwater supply and a high pressure pump system and vacuum to lift water, sediment, pollution and debris from drainage structures.

Culvert repair includes replacing damaged tiles and bands, resetting culvert sections that have become separated, repairing bent or broken culvert ends, and stopping leaks associated with cracks and loose mortar. Work crews may use hand tools and heavy

equipment to replace damaged sections, as well as seal, re-mortar or re-grout damaged culvert components.

Culverts in need of replacement are identified through the annual Snohomish County Paving Program or inspections. When culvert replacement is required, they are often replaced by a larger culvert to better convey the hydraulic flow and debris of 100-year storms or to improve fish passage in accordance with Washington State Regulations (WAC 220-110-070). Typically, the existing culvert will be removed using a backhoe and a dump truck and the new culvert will be installed using the same equipment. The roadway and shoulder would be repaired in accordance with Snohomish County Road Maintenance Performance Standards and Standard Operating Procedures.

Catch Basin Cleaning, Repair and Replacement:

Catch basin cleaning, repair and replacement includes catch basins and manholes. Catch basins and manholes must be cleaned regularly to prevent sediment and pollution from washing downstream and clogging the drainage system. Work crews would use hand tools to remove sediment and debris from the areas surrounding the basins and use a Vactor/Jetter truck to clean and remove sediment, debris and pollutants from inside the basin or manhole.

Repairs to these facilities include adjusting grate elevation, replacing grates, cleaning and replacing filters, as well as repairing cracks, leaks and other conditions that could cause breakdowns in the drainage system. Work crews may replace non-functional parts of the catch basin or manhole, and re-mortar or re-grout facility components to prevent leaks. In some cases, old and failing catch basins may need to be replaced. Work crews would use hand equipment such as shovels, and heavy equipment such as an excavator, to remove the failing catch basin and replace it with a new catch basin. In general, catch basins are replaced with cast style basins.

Detention and Infiltration Facility Maintenance:

Detention and infiltration include but are not limited to dry wells, “bottom-less catch basins,” chamber systems, basins, rain gardens, detention vaults, ponds and swales. Maintenance involves inspecting these structures, removing sediments, maintaining vegetation, cleaning filters and pipes, fixing or replacing broken or non-functioning parts, and repairing underground drainage detention facilities (e.g. detention vaults). Work crews would use heavy equipment such as tractors, Vactor/Jetter trucks, excavators and dump trucks, as well as hand tools such as weed eaters, shovels, wrenches and personal protective equipment (e.g. fresh air supply blower) to maintain these facilities.

In some case, the County applies additional treatments and drainage structures or replaces facilities (e.g. ditches) with other facilities in order to increase infiltration and reduce flooding. These treatments include amending soils to increase infiltration. Facilities and structures include installation of dry wells, chamber systems, basins, rain gardens, and swales (including bioswales and infiltration swales). Maintenance of these

structures would be project and location specific, and require hand equipment and heavy equipment similar to those identified above.

Other Drainage Facilities:

The Road Maintenance Division installs and maintains a variety of drainage facilities including park drainage facilities and other drainage-related structures. Park drainage facilities and other drainage related activities, such as replacement of open drainage facilities with closed piped conveyances, would vary by project and location. Work crews would use equipment and methods similar to those used for maintenance of other surface water drainage facilities.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of you proposed proposal, include a street address, if any, and section, township, and range, if known. If proposal would occur over a range of area, provide the range or boundaries of the affected geographic area. Provide a legal description, affected geographic area plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.
- Maintenance activities would occur throughout the County and in some cases adjoining counties. Snohomish County works in cooperation with adjoining counties on select surface water drainage facilities that provide benefits to Snohomish County. See *Map 1 – Snohomish County – Public Lands, Township/Range Section* for further information on the proposal location.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site: flat, rolling, hilly, steep slopes, mountainous, other.
- The County encompasses approximately 2,098 square miles. Six major topographic plateaus separated by narrow streams and broad river channels characterize the western portion of the County. Floodplains formed by the Snoqualmie, Skykomish, Snohomish, and Stillaguamish Rivers create topographic boundaries between the plateaus. The land in this area is flat to rolling in bench-like glaciated plains. The eastern portion of the County contains the foothills and mountains of the Cascade Mountain Range. Very steep mountains and narrow valleys characterize this area. The Sauk River forms a floodplain of limited extent along the northeast boundary of the County.
- b. What is the steepest slope on the site (approximate percent slope)?
- Slopes in the County vary by individual maintenance sites, ranging from 0 percent to over 50 percent. Ditch gradients vary from 0 to 12 percent, while ditch side slopes range from 1 percent to near vertical faces.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The Natural Resources Conservation Service (formerly the Soil Conservation Service) has mapped six general soil types in the County.

- 1. Puget-Sultan-Pilchuck: found on flood plains along the major streams in the northern, central and southern parts of the County. This soil type is very deep, and drainage varies from poor to excessive.**
- 2. Norma-Lynnwood Custer: found in the north-central part of the County. Very deep, drainage varies from poor to excessive.**
- 3. Alderwood Everett: found adjacent to Puget Sound, along the western boundary of the County. Moderately to very deep, moderately to somewhat excessively drained.**
- 4. Tokul-Pastik: found in the central, northern, and southern parts of the County. Moderately to very deep, moderately well drained.**
- 5. Elwell-Olomount-Skykomish: found in the mountainous eastern part of the County. Moderately to very deep, moderately well drained to somewhat excessively drained.**
- 6. Getchell-Oso: found in the mountainous northern and southern edges of the County. Moderately deep and moderately well drained.**

These general types are divided into approximately 40 different kinds of soil. Soil types would vary by site.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

The Puget Sound region, including the County, is susceptible to several types of hazardous soil or geological conditions including: erosion, landslide, and seismic hazards. Maintenance activities would generally not occur on unstable soils, however certain types of repair activities, such as shoulder repairs and stabilizations, may be required as the result of unstable soils. If work on or in unstable soils is required, slope stabilization and erosion control BMPs would be employed, a Geological Technical Memorandum may also be prepared for major soil disturbing activities.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, or grading proposed. Indicate source of fill.

Road maintenance activities may involve minor filling, excavation, or grading. For most maintenance projects fill would generally not exceed 100 cubic yards and would come from either re-use of existing fill or County-approved sources. However some maintenance activities, such as embankment stabilization and repair or ditch cleaning, do require greater amounts of fill and excavation. The amount of fill and/or excavation would depend on the individual maintenance activity. Filling, grading and

excavation activities will comply with all applicable local, state and federal regulations.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Minor amounts of erosion may occur as the result of maintenance and repair activities, such as culvert replacement. Any increase in erosion or turbidity would be temporary and will be addressed through implementation of applicable BMPs in the *Snohomish County Drainage Manual*, *RRMESA Program Guideline* BMPs and *Snohomish County Road Maintenance Standard Operating Procedures*.

g. About what percent of the site will be covered with impervious surfaces after project construction?

The amount of impervious surface would vary by each site where maintenance activities occur. In general, maintenance and repair activities would not result in an increase of impervious surfaces.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Appropriate BMPs identified in permits, the *Snohomish County Drainage Manual*, *RRMESA Program Guideline* and *Snohomish County Road Maintenance Standard Operating Procedures* will be adhered to during all road maintenance work. Where possible, work where water is present will be performed during no or low flow conditions or flow will be temporarily diverted. Temporary silt control fences, check dams, filter fabric, straw bales, temporary diversions, or other appropriate erosion control measures would be utilized as necessary to control and minimize erosion and turbidity during maintenance activities. Equipment would be staged from the paved area of the road or equipment staging areas with temporary erosion and sediment control measures. Any slopes or soils exposed by maintenance activities would be hydro-seeded, re-vegetated, or another appropriate BMP would be used to prevent erosion.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Construction equipment, vehicles, and construction-related activities may result in temporary, minor increases in exhaust emissions. Some dust may be generated during filling, grading or excavating activities but would be temporary in nature. There would be no further emissions once repairs are complete.

b. Are there any off site sources of emissions or odor that may affect your proposal? If so, generally describe.

Sources of emissions or odors would vary by site, but in general, road maintenance and repair activities would not be affected by off-site emissions or odors.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any.
Emissions from equipment and vehicles would not exceed federal and state air quality standards and will meet Occupational Safety and Health Administration (OSHA) and Washington Department of Occupational Safety and Health (DOSH) standards.
Vehicles would be turned off when idle.

3. Water

a. Surface Water

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The western border of the County is formed by Puget Sound. Possession Sound carves into the mainland, forming Port Gardner Bay next to the City of Everett. Tidewaters of the Sound mix with freshwater in the Snohomish River estuary (encompassing Ebey, Union, and Steamboat Sloughs).

The County contains two major river basins. The Stillaguamish River and its north and south forks dominate the northern region, while the Snohomish River and its two major sources, the Skykomish and Snoqualmie dominate the south. These rivers have their sources in the forested mountain areas and flow generally west through broad agricultural floodplains into Puget Sound.

Smaller stream basins are generally oriented north/south, and several of these, such as North Creek, Swamp Creek, and Quilceda Creek, flow through rapidly developing suburban and urban areas. The Sauk River forms a small floodplain north and east of Darrington, in the northeast portion of the County and flows north to the Skagit River in Skagit County. Streams are classified by the County as shorelines of the State, fish bearing, non-fish bearing perennial or non-fish bearing seasonal, based on a number of factors, including channel width, gradient, flow, impoundment, fish use, diversion, and other factors. The County also contains numerous wetland areas categorized into four types depending on their size and functions (SCC 30.62A.300).

Maintenance activities may occur in the vicinity of surface waters and wetlands. In such cases, a natural resource specialist will review these sites to ensure that maintenance activities will comply with all applicable state, federal, and local regulations.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Some activities would occur in or adjacent to water. Any activity occurring over, in or adjacent to water will undergo the appropriate level of environmental review and will comply with all applicable federal, state, and local regulations.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Most road maintenance activities would not require the placement of fill material in surface water or wetlands. However, sediment removal and fill would occur as part of some maintenance activities. For example, ditch cleaning would include excavating sediment from roadside ditches some of which convey streams. The amount of sediment removed during road maintenance activities would vary based on site conditions and the type infrastructure that requires maintenance. Excavated material may remain on-site or be removed and disposed of at a County-approved disposal site. Fill and dredge activities will undergo the appropriate level of environmental review and will comply with all applicable federal, state, and local regulations.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Most road maintenance activities would not result in the withdrawal or diversion of surface water. However, some activities may require temporary diversion of surface waters. Wherever possible, such activities would be done during periods of low or no flow. Any withdrawals or diversions that do occur will comply with all applicable regulatory requirements.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Some activities may occur within the 100-year floodplain. All applicable permits will be acquired before performing the work.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

All appropriate BMPs and containment measures will be used to prevent construction debris or waste materials from entering surface waters.

b. Ground Water

1) Will ground water be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses, and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Some of the facilities, maintained by the Road Maintenance Division, discharge to groundwater infiltration. In general, maintenance activities would not directly require withdrawals from or discharges to groundwater. However in some case, the County replaces existing drainage facilities with other types of facilities in order to increase

infiltration and/or reduce hazards. Examples of these facilities include: infiltration ponds, swales and dry wells. Maintenance activities will comply with applicable local, state and federal regulations including the Department of Ecology Underground Injection Control (UIC) program.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material would be discharged into the ground. However, street sweepings removed from road surfaces or sediment removed from drainage facilities may include oil, grease, lead, or other heavy metals. These contaminants would have the potential to discharge into ground waters if they were not removed.

c. Water Runoff (including storm water)

1) Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

For most activities, stormwater would runoff into drainage infrastructure, such as roadside ditches, and be released into the receiving waterway. Routine maintenance would generally not increase the amount of stormwater runoff or impede its flow. Routine road maintenance activities would not substantially increase the amount of impervious surfaces.

2) Could waste materials enter ground or surface waters? If so, generally describe.

In general, road and drainage infrastructure maintenance would remove waste materials from stormwater prior to discharge to ground or surface waters. Waste materials generated from maintenance activities would be disposed of in accordance with applicable regulations. Accidental spills may occur during the course of routine maintenance. Spills will be immediately addressed using on-site spill kits, thereby preventing potential discharges to ground or surface waters.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Road Maintenance activities generally restore or maintain existing drainage patterns. However, some road maintenance activity may result in minor alterations to drainage patterns. Examples of these activities include culvert replacement which may require diversions of water during construction, or installation and cleaning of permeable pavement and sidewalk that would reduce input into the stormwater system. Where possible, maintenance would be completed during low- or no-flow conditions to minimize adverse impacts.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any.

Erosion control BMPs specified in permits and applicable regulatory requirements will be used during all ground-disturbing work. All appropriate measures will be taken to reduce impacts to surface and ground water and runoff. Where possible, work would be done during periods of low- or no-flow to minimize adverse environmental impacts. Typical BMPs include: installation of temporary erosion fences around equipment staging areas and stage equipment from the paved area of the road. The *RRMESA Program Guidelines*, *Snohomish County Drainage Manual*, and other pertinent documents provide guidance for the use of erosion control BMPs.

BMPs would be used, as appropriate, to control and minimize site erosion and turbidity may include, but not limited to:

- Silt control fencing for perimeter flow containment: Check or diversion dams for water flow control and sediment containment; Filter fabric fencing as perimeter sediment containment barrier.
- Hydro-seeding and hand seeding of grass on exposed soil areas to prevent soil loss: Plastic covering of bare soil areas to exclude rain contact with exposed areas.
- Pumping water flows around site to create dry working conditions: Staging machinery use out of water flow areas.

4. Plants

a. Check the types of vegetation found on or in close proximity to the site:

- ☒ Deciduous trees: alder, maple, willows and other native and non-native species
- ☒ Evergreen trees: fir, cedar, pine and other native and non-native species
- ☒ Shrubs: salmonberry, thimbleberry, snowberry, sword fern, and other native and non-native species
- ☒ Grass: native and non-native grasses, lawns
- ☒ Pasture: pasture grasses occur throughout the rural areas of the County
- ☒ Crop or grain: wheat, hops and other non-native species
- ☒ Orchards, vineyards or other permanent crops.
- ☒ Wet soil plants: cattail, buttercup, bulrush, skunk cabbage and other native and non- native species
- ☒ Water plants: water lily, eelgrass, milfoil, other native and non-native species
- ☒ Other types of vegetation: Himalayan blackberries, reed canary grass and other native, non-native species, and ornamental species are found throughout the County

Vegetation would vary by site. The County has a variety of both native and non-native plant species. Any of the types of vegetation listed above may occur on or adjacent to a site.

b. What kind and amount of vegetation will be removed or altered?

Vegetation management would require removal of vegetation to comply with traffic safety standards. Vegetation removal may also be required prior to other maintenance activities. Only vegetation required to complete maintenance work or maintain safety standards would be removed.

c. List threatened and endangered plant species known to be on or near the site.

According to the Washington State Department of Natural Resources Natural Heritage Information System there are 1 Endangered species, 5 Threatened species, 20 Sensitive species, and 7 species of Potential Concern in the County. Under the Endangered Species Act there is one plant Species of Concern.

If a threatened or endangered plant species is suspected to be on or near a site, an environmental review would be conducted to confirm the presence or absence of Threatened or Endangered plant species. Where such species are discovered, all work will comply with the Endangered Species Act, applicable species-specific BMPs developed by the RRMESA, and other applicable regulations.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation of the site, if any:

Any slopes or soils exposed by maintenance activities would be hydro-seeded, re-vegetated, or another appropriate BMP would be used to prevent erosion. BMPs will be used whenever applicable. All work will conform to issued permits and applicable local, state and federal regulations.

e. List all noxious weeds and invasive species known to be on or near the site.

Several noxious weeds are known to occur near County maintained roadways and may occur in the vicinity of road maintenance activities:

- **Tansy ragwort,**
- **Canada and Bull thistle,**
- **Hawkweed,**
- **Knapweed,**
- **Garlic mustard,**
- **Wild chervil,**
- **Common fennel,**
- **Purple loosestrife,**
- **Policeman's helmet,**
- **Poison hemlock,**
- **Spurge laurel,**
- **Dalmation toadflax,**
- **Giant hogweed, and**
- **Gorse.**

For a complete list of County noxious weeds see:
<http://snohomishcountywa.gov/750/2974/Noxious-Weeds-List>.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: hawks, heron, eagle, songbirds, other: owls, ducks, woodpeckers, ravens

Mammals: Beaver, river otter, weasels, opossum, raccoon, coyote, small rodents, skunk, deer

Fish: salmon, lamprey, trout, bass, herring, shellfish

Any of the above types of wildlife may occur on or adjacent to a maintenance site. Some culverts or roadside ditches may carry fish-bearing streams, or may be tributaries to fish-bearing streams. All activities will undergo appropriate review and will comply with all provisions of the Endangered Species Act, HPA, and other applicable regulatory requirements.

b. List any threatened and endangered wildlife species known to be on or near the site.

Wildlife would vary by site. As of July 2015, threatened, endangered, sensitive or priority species found within the County include:

Common Name	Latin Name	Federal Designation	State Designation
Puget Sound ESU Chinook salmon	<i>Oncorhynchus tshawytscha</i>	Threatened	Candidate
Puget Sound DPS Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	N/A
Bull trout	<i>Salvelinus confluentus</i>	Threatened	Candidate
Pygmy whitefish	<i>Prosopium coulteri</i>	N/A	Sensitive
Margined sculpin	<i>Cottus marginatus</i>	N/A	Sensitive
Olympic mudminnow	<i>Novumbra hubbsi</i>	N/A	Sensitive
Oregon spotted frog	<i>Rana pretiosa</i>	Threatened	Sensitive
Larch mountain salamander	<i>Plethodon marselli</i>	N/A	Sensitive
Common loon	<i>Gavia immer</i>	N/A	Sensitive
Peregrine falcon	<i>Falco peregrinus</i>	Species of Concern	Sensitive
Bald eagle	<i>Haliaeetus leucocephalus</i>	Species of Concern	Sensitive
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	Threatened	Threatened
Northern spotted owl	<i>Strix occidentalis caurina</i>	Threatened	Endangered

Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Threatened	Candidate
Fisher	<i>Martes pennanti</i>	Endangered	Endangered
Gray wolf	<i>Canis lupus</i>	Endangered	Endangered
Grizzly bear	<i>Ursus arctos horribilis</i>	Threatened	Endangered
Southern resident killer whale	<i>Orcinus orca</i>	Endangered	Endangered

Where federally Threatened species are found, all work will conform to the requirements of the Endangered Species Act. Where state listed species or Priority Habitats and Species (PHS) are found, the *Washington Department of Fish and Wildlife Priority Habitats and Species* recommendations will be followed, when appropriate. The most current PHS list can be found at:
<http://wdfw.wa.gov/conservation/phs/list/>.

c. Is the site part of a migration route? If so, explain.

Yes, most maintenance activities would occur within or adjacent to a migration routes. Migration routes are seasonally based and would vary for different animal species. Examples of migratory routes within the County include the Pacific Flyway and streams used for salmonids migrating from saltwater to freshwater spawning areas. The Pacific Flyway stretches between Alaska and South America. All migratory birds are protected by the Migratory Bird Treaty Act (MBTA) administered by the U.S. Fish and Wildlife Service. Bald eagles are also protected by the Bald and Golden Eagle Protection Act, also administered by the U.S. Fish and Wildlife Service.

d. Proposed measures to preserve or enhance wildlife, if any:

Where possible, the County would preserve and enhance wildlife by avoiding impacts during maintenance activities. If in-stream work is required, then it would typically be done in the summer or fall during periods of low or no flow, or in accordance with conditions of a HPA. BMPs such as the use of silt fences and straw bales to control sediments will be used where applicable.

It is possible that work may occur during higher flow conditions in urgent flooding situations. Emergency maintenance activities would be subject to additional environmental review. Flows may be temporarily diverted, if necessary. Applicable erosion control BMPs will be implemented to protect water quality and prevent erosion. Work occurring in fish-bearing streams will comply with the requirements of applicable permits as well as federal, state and local regulations.

e. List any invasive animal species known to be on or near the site.

The presence of invasive animal species would vary by site. If an invasive animal species is present on or near a site additional environmental review or analysis may be required prior to the maintenance activity.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Vehicles and equipment will be turned off when idle and in compliance with OSHA and DOSH standards. All equipment is maintained so that fuel efficiency is maximized.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

Construction hazards common to the use of heavy equipment (such as fires or injury) and work in confined spaces could occur during maintenance activities. A potential exists for vehicles to leak small amounts of oil on to road surfaces. Spill control kits would be located on-site to contain and clean up spills. Leaks would be promptly repaired upon detection.

1) Describe any known or possible contamination at the site from present or past uses.

Areas maintained by the County, such as road right-of-way and drainage infrastructure, may become contaminated from normal use, accidental spills, illegal dumping or adjacent activities (including utilities). If a site is found to be contaminated, all work would stop, the area would be evaluated for impacts to human health and the environment and appropriate measures taken. In some cases this may mean containment and site clean-up or issuing appropriate personal protective equipment. Other agencies such as the Washington State Department of Ecology (DOE) would be notified, if appropriate.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Utilities are often co-located within the road right-of-way. These utilities include above ground electric transmission lines and below ground utilities (e.g. fiber optic, water and sewer lines). Most road maintenance activities do not involve disturbance

below the road surface. When ground disturbing activities are required utilities will be located and avoided where possible. Additionally maintenance of drainage infrastructure may require work in confined spaces.

3) Describe any toxic or hazardous chemicals that might be stored, used or produced during the project's development or construction, or at any time during the operating life of the project.

Several hazardous chemicals are routinely used to maintain roadways and drainage infrastructure. These chemicals include: asphalt, concrete, grout, tack oil, chip seal oil, paint and thermal plastics (used for roadway markers). Additionally road maintenance equipment also utilizes several hazardous chemicals such as: gasoline, diesel fuel, oil, hydraulic fluid, and engine coolants. Thinners, solvents and other cleaning agents may also be used in limited circumstances to maintain equipment.

During the life of the roadway, chemical deicers may be applied during winter ice conditions. Chemical deicers currently utilized or planned for use include Calcium Magnesium Acetate (CMA), Calcium Chloride and salt brine.

4) Describe special emergency services that might be required.

Fire or ambulance services could be required in the event of a construction accident. A confined space entry team may also be required in the event of an accident while crews are maintaining certain types of drainage infrastructure.

5) Proposed measures to reduce or control environmental health hazards, if any:

Spill control kits are carried by maintenance vehicles. All equipment would be well maintained and in good repair to prevent the loss of petroleum products. Crew leads are equipped with cellular telephones and equipment operators are trained in the safe use of equipment

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, aircraft, other)?

Does not apply.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

During short-term construction, there would be increased noise from heavy equipment. Most construction noise would occur during daylight hours, Monday through Friday. Emergency repairs may be required to be performed at night or on weekends. There would be no additional noise impacts once construction is complete.

3) Proposed measures to reduce or control noise impacts, if any:

Maintenance would normally be limited to the hours of 7:00 a.m. – 8:00 p.m., Monday through Friday. Personal protective equipment will comply with applicable OSHA and DOSH standards.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Locations where routine road maintenance and repair activities occur consist of public rights-of-way, easements and stormwater drainage facilities. Adjacent properties would include rural, residential, forested, recreational, industrial, commercial, and urban uses.

b. Has the site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to non-farm or non-forest use?

Many roadways were constructed in historic farmlands and forestlands. In general, maintenance of roadways and drainage infrastructure would not require additional working farmlands or working forestlands to be converted into other uses. In extremely rare cases additional right-of-way may be required to repair and maintain infrastructure such as stabilizing embankments. In these cases, permanent easements would be sought and small areas adjacent to the right-of-way may be converted from their current uses (including forest land and farmland).

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how,

No affects are anticipated to normal business operations of working farms or forest land from road maintenance activities, other than temporarily lane closures.

Watershed management practices including forest harvest practices affects the water and sediment discharge from rivers. Higher intensity peak flows and debris can damage roadside embankments and drainage infrastructure, thereby requiring maintenance and repair activities.

c. Describe any structures on the site.

Public rights-of-way within the County contain utility infrastructure, roadways, stormwater conveyance systems and structures such as catch basins, bridges, walls and culverts.

d. Will any structures be demolished? If so, what?

In general, no structures would be demolished. Failing or inadequate stormwater facilities may be removed, replaced or upgraded as part of road maintenance

activities. Maintenance of the traffic control system may require the removal or placement of infrastructure such as signs and guardrails.

e. What is the current zoning classification of the site?

Zoning classification would vary by site. Work will be limited to developed public rights-of-way, easements, or drainage infrastructure.

f. What is the current comprehensive plan designation of the site?

The comprehensive plan designation would vary by site.

g. If applicable, what is the current shoreline master program designation of the site?

Shoreline master program designations would vary by site. Most maintenance projects are shoreline permitting exempt pursuant to the County's *Shoreline Management Master Program (SMMP)*. Maintenance activities in designated shoreline management areas will undergo all appropriate review.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes. In the County, environmentally sensitive area such as geologically unstable areas, fish and wildlife habitat conservation areas, and streams or wetlands and their buffers are classified as critical areas. Road maintenance activities may occur in or adjacent to these critical areas.

i. Approximately how many people would reside or work in the completed project?

Does not apply.

j. Approximately how many people would the completed project displace?

Does not apply.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Does not apply.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

All work would be consistent with the applicable area comprehensive plans and policies.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing.

Does not apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does not apply.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Road repair activities would not generally result in any changes in height of any structures.

b. What view in the immediate vicinity would be altered or obstructed?

Does not apply.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Any slopes or soils exposed by maintenance activities would be hydro-seeded, re-vegetated, or another appropriate BMP would be used to prevent erosion.

Restoration would generally be done in a manner so as to be consistent with the surrounding area in terms of pavement, vegetation, and shoulder material.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Work is usually done during the day. However, during urgent or emergency situations, it is possible that some work activity may occur at night and require that spotlights be used.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Does not apply.

c. What existing off-site sources of light or glare may affect your proposal?

Does not apply.

d. Proposed measures to reduce or control light and glare impacts, if any:

Does not apply.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
Bicyclists and pedestrians use public roadways for recreational and personal uses. Recreational uses may occur adjacent to or in the vicinity of road maintenance activities.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
It is unlikely that routine road maintenance activities would substantially interfere with any recreational activities. It is possible that some maintenance activities may impair access to recreational opportunities during construction, for example, if a road closure is required. Pedestrian access may also be temporarily limited.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
Road closures would be avoided where possible. If a road closure is necessary, a detour route would be provided. Every attempt would be made to avoid impairing public access. Traffic control devices such as cones, signs, and flaggers would be used to direct motorists around the site and to alternate access. When possible, advance notice would be provided.

13. Historic and Cultural Preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, generally describe.
Road maintenance activities typically occur within the road right-of-way. Activities may occur in the vicinity of buildings or structures that are over 45 years of age, however, those structures would typically be outside of the area maintained by the Road Maintenance Division.
- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site. Please list any professional studies conducted at the site to identify such resources.
The County evaluates activities where ground disturbance of native soils is required or locations with a higher probability for proximity to recorded cultural locations. Activity locations are mapped and compared to the Geographic Information System (GIS) layer of known cultural sites provided by the Washington Department of Archaeology and Historic Preservation (DAHP) as part of a data sharing agreement. This process identifies projects that may be in proximity to a known cultural site. If a project area is in close proximity to a known cultural site, appropriate tribal liaisons would be notified and information related to inadvertent discoveries would be provided to work crews.

A professional archeologist will be consulted for maintenance activities that directly intersect known archeological or historic sites. An archeological survey may be conducted, if determined necessary, to identify whether historic or cultural resources could be affected by the maintenance activity. Road maintenance activities typically occur on the road or adjacent to the road in areas that have been otherwise extensively disturbed.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

A cultural resources evaluation would be conducted for activities that require ground disturbance in native soils or other sites with a higher probability for proximity to recorded cultural locations. Activity locations would be mapped and compared with a GIS layer of known cultural sites provided by DAHP. If necessary, a cultural resources investigation may be conducted by an archaeologist at the maintenance site, within a defined Area of Potential Effects (APE), to determine potential effects to below ground resources. If a cultural resource investigation is required, the County would consult with area tribes and DAHP prior to commencing the maintenance activity.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

If any ground-disturbing activities, or other project activities related to road maintenance, uncover protected cultural material (e.g., bones, shell, stone or antler tools), all work in the immediate vicinity would stop, the area would be secured, and any equipment moved to a safe distance away from the location.

If any ground disturbing activity uncover human remains all work in the immediate vicinity would stop, the area secured and any equipment would be moved to a safe distance away from the location. The on-site supervisor would then follow the steps specified in the Snohomish County Archeological Sites Advisory (Assistance Bulletin #103) or other inadvertent discovery information provided by the Road Maintenance Environmental Staff to the on-site supervisor.

14. Transportation

a. Identify public streets and highways serving the site, or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

The County maintains a system of arterials, collectors, and local access streets.

Maintenance activity would occur within County rights-of-way, easements or drainage infrastructure.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Transit service would vary by site. Four public transit agencies provide service within the County. They are Sound Transit, Community Transit, Everett Transit, and King

County Metro. Sound Transit provides service between King and Snohomish counties. Everett Transit provides service within the Everett city limits. Metro provides vanpools for King County residents commuting to Snohomish County employers, and Community Transit provides the bulk of transit service in unincorporated Snohomish County as well as providing service to King County.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Does not apply.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private)

No new permanent roads would be required.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Some maintenance activities may occur in the vicinity of water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial or non-passenger vehicles). What data or transportation models were used to make these estimates?

Vehicular trips generated during construction would vary by site. There would be vehicles transporting equipment and workers to the site during maintenance activity. The completed maintenance work would not result in increased daily vehicular trips.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Temporary short-term road or lane closures may be associated with road maintenance activities. However, long term maintenance of roadways would improve the safe transport of agricultural and forest products.

h. Proposed measures to reduce or control transportation impacts, if any:

Maintenance of public road and stormwater drainage facilities helps to prevent catastrophic failures which could result in long term road closures. If a road closure is necessary during the maintenance activity, a detour route would be provided. Traffic control devices (cones, signs, flaggers) would be used where necessary to protect and direct motorists during construction. Advance notice of road closures or traffic delays would be provided when possible.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No additional or increased need for public services is anticipated. Road repairs and maintenance would ensure adequate access and delivery of public services once completed.

b. Proposed measures to reduce or control direct impacts on public services, if any.

When possible, advance notification of maintenance activities would be provided. Due to the urgent nature of some repair activities, such advance notice may not always be possible.

16. Utilities

a. Utilities currently available at the site:

Utilities would vary by site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

The Road Maintenance Division routinely coordinates with utility companies to locate utility lines and to shut off utilities when necessary to safely perform road maintenance work. Aside from this coordination, no utility services are required to perform maintenance work.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:  _____

Name of signee: Mary Auld

Position and Agency/Organization: Senior Planner, Snohomish County Public Works

Date Submitted: October 20, 2015

